

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001310**Date Inspected:** 21-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Orthotropic Box Girders (OBG).

Bay 7 OBG:

The QA Inspector randomly observed ZPMC welder Huang Xinlan ID Number 044780, utilizing the Submerged Arc Welding (SAW) Process with ZPMC approved Weld Procedure Specification (WPS)

WPS-B-T-2221-B-L2c-S-1 in the 1G position to weld the fill and cover pass in Floor Beam Sub-Assembly FB026-01 at WJ's FB026-01-081 (PL X12F to X18B), 101 (PL X18B to X20A + X20B). The QA Inspector randomly observed ZPMC CWI Cui Yi Ru monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: welding amperage 530 amps, welding voltage 30.6 volts with a travel speed of 440 mm per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector performed a random fit up verification of the flange plates and stiffeners on Floor Beam Webs FB001-03 and FB007-01, at the request of ZPMC Quality Representative Shen Xue Jun. The locations and dimensions appeared to comply with the contract assembly drawings sheets FB1/FB1A and FB7/FB7A.

The QA Inspector randomly observed ZPMC welder Wang Changfa ID Number 058102, utilizing the SMAW Process with ZPMC approved WPS WPS-B-P-2112 in the 2F position to tack weld Stiffener X2H to Floor Beam Web FB002-01, Plates X94B + X47A + X15A at WJ's FB002-01-011, 012. The QA Inspector randomly observed

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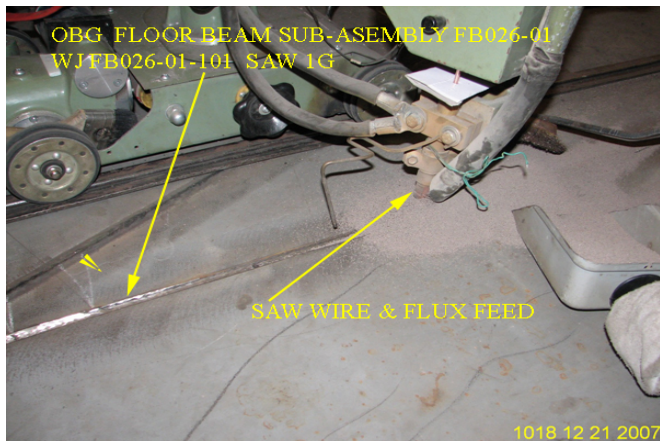
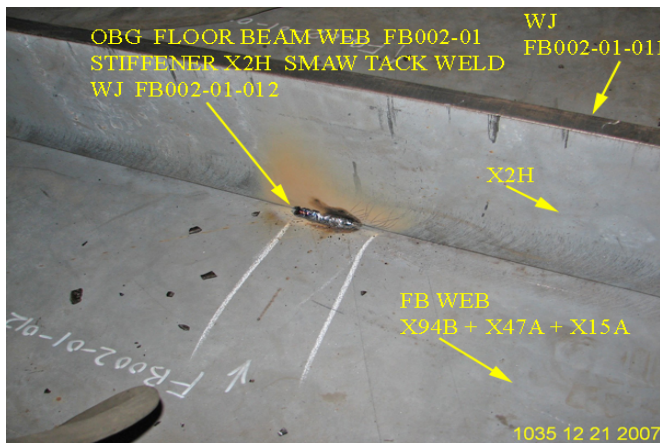
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ZPMC CWI Cui Yi Ru, monitoring weld parameters. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Huang Xinlan ID Number 044780, utilizing the Submerged Arc Welding (SAW) Process with ZPMC approved Weld Procedure Specification (WPS) WPS-B-T-2221-B-L2c-S-1 in the 1G position to weld the fill and cover pass in Floor Beam Sub-Assembly FB018-01 at WJ FB018-01-101 (PL X12E + X18A (SPCM) to X20A +X20B). The QA Inspector randomly observed ZPMC CWI Cui Yi Ru monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: welding amperage 530 amps, welding voltage 31 volts with a travel speed of 430 mm per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welder Yuan Wensong ID Number 055491, utilizing the Flux Cored Arc Welding (FCAW) Process with ZPMC approved WPS WPS-B-T-2132-1 in the 2F position to weld Flange Plate X7E to Floor Beam Sub-Assembly FB007-01 at WJ FB007-01-004. The QA Inspector randomly observed ZPMC CWI Zhang Zhong monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: welding amperage 274 amps and welding voltage 29 volts. Travel speed was not recorded. The weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC Welding Personnel performing heat straightening operations per HSR1(B)-003 on Floor Beam Sub-Assembly FB007-02 at WJ FB007-02-021, Plates X46A + 46C+ X14A.



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Summary of Conversations:

There were no relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer
